

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

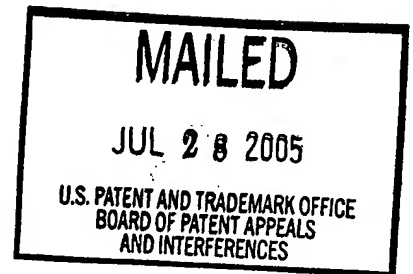
BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte JAMES CANNON BIBLE and  
ROBERT ANTOINE WRIGHT



Appeal No. 2005-1492  
Application No. 10/082,375

ON BRIEF



Before GARRIS, PAK, and PAWLIKOWSKI, Administrative Patent Judges.  
GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal which involves claims 1-9.

The subject matter on appeal relates to a process for coating a continuous length of material which comprises applying tension to a portion of the material, applying an electron-beam curable coating to this portion and exposing the coated portion to an electron beam to cure the coating applied thereon. This appealed subject matter is adequately represented by claims 1 and 8, which read as follows:

1. A process for coating a continuous length of material comprising the steps of:

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applying tension to a portion of said continuous length of material;

applying an electron-beam curable coating to the portion of said material under tension; and

exposing the coated portion of said material to an electron beam to cure the coating applied thereon.

8. The process as claimed in claim 1 wherein the step of applying a coating to said material is further comprised of the following steps:

washing the portion of said material under tension;

rinsing the portion of said material under tension;

drying the portion of said material under tension; and

applying the electron beam curable coating to the portion of said material under tension.

The references set forth below are relied upon by the examiner as evidence of obviousness:

Ostrowski	3,965,551	Jun. 29, 1976
Asai et al. (Asai)	6,103,317	Aug. 15, 2000
Maddox et al. (Maddox)	6,306,468	Oct. 23, 2001

Claims 1, 2, 4, 8, and 9 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Ostrowski in view of Maddox, and claims 3 and 5-7 are correspondingly rejected over these references and further in view of Asai.<sup>1</sup>

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<sup>1</sup> On page 3 of the Brief, the appellants indicate that the appealed claims do not stand or fall together in accordance with the rejections thereof. It follows that we will consider each  
(continued...)

We refer to the Brief and to the Answer for a complete exposition of the opposing viewpoints expressed by the appellants and by the examiner concerning these rejections.

#### OPINION

For the reasons set forth in the Answer and below, we will sustain each of these rejections.

Ostrowski discloses a process for coating a continuous length of metal tubing which comprises a tension applying step of the type defined by appealed claim 1. According to patentee, this tension applying step yields numerous advantages (e.g., see the Abstract, lines 29-46 in column 1, the paragraph bridging columns 5 and 6, lines 6-27 in column 6 and lines 4-24 in column 8). Claim 1 differs from Ostrowski by requiring that the coating be cured via an electron-beam. In patentee's process, the coating is cured via induction heaters (e.g., see lines 46-55 in column 3).

Maddox also discloses a metal tube coating process. In this process, the coating is cured via an electron beam which is disclosed as having a number of advantages particularly relative

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<sup>1</sup>(...continued)  
claim separately to the extent that it also has been separately argued. See former regulation 37 CFR § 1.192(c)(7)(2003) as well as current regulation 37 CFR § 41.37(c)(1)(vii)(September 2004).

to induction heaters (e.g., see the Abstract, lines 60-67 in column 5 and lines 1-11 in column 6).

In light of these respective reference teachings, we fully share the examiner's conclusion that it would have been obvious for an artisan to modify the Ostrowski process by replacing the induction heater curing system thereof with an electron beam curing system of the type and for the reasons taught by Maddox. This replacement would have been motivated by the desire to combine the advantages taught by Ostrowski to result from his tension applying step with the advantages taught by Maddox to result from his electron beam curing system.

In support of their contrary view, the appellants argue that "Ostrowski contains no teaching or suggestion regarding the use of electron beam curable coatings or electron beam radiation and the desirability of applying them in combination with a material under tension as required by applicant's claims" (Brief, pages 4-5). The appellants additionally argue that "[t]he Maddox reference simply does not disclose, teach or otherwise contemplate placing a material to be coated under tension, nor does it suggest the desirability of combining a method of applying and curing electron beam coatings on a length of material under tension" (Brief, page 5). In our opinion, these

arguments amount to an inappropriate attack of the references considered individually. It is well settled, however, that nonobviousness cannot be shown by attacking individual references where, as here, the rejection is based on a combination of references. In re Keller, 642 F.2d 413, 426, 208 USPQ 871, 882 (CCPA 1981). This is because, with respect to such a rejection, the test for obviousness is what the combined teachings of the references would have suggested to those of ordinary skill in the art. Id., 642 F.2d at 425, 208 USPQ at 881. For the reasons expressed above and in the Answer, the combined teachings of Ostrowski and Maddox would have suggested the provision under consideration.

Concerning dependent claim 8 (as well as claim 9 which depends therefrom), the appellants further argue that the applied references contain no teaching or suggestion of effecting the washing, rinsing and drying steps of Ostrowski's process while patentee's tubing or material is under tension as here claimed. In this regard, the appellants emphasize that patentee's tubing is supported by rollers during the washing, rinsing and drying steps. While this last point is true, it does not militate in favor of patentability for claim 8. This is so for two reasons.

First, the claim merely requires that the washing, rinsing and drying steps be "under tension" and does not exclude use of rollers. Second, as logically determined by the examiner, the tension applied to the tubing by Ostrowski's take-off device (e.g., see lines 26-34 in column 5) would necessarily be present during patentee's washing, rinsing and drying steps due to the fact that the tubing is a continuous length from a point preceding the aforementioned steps to the take-off device (e.g., see Figure 1 and the specification disclosure relating thereto).

Concerning the rejection based on Ostrowski, Maddox and Asai, the appellants argue that no basis exists for combining the teachings of these references. In particular, the appellants urge that "it would be counterintuitive to combine the teachings of Asai that no solvents or water are required, with the teachings of either Maddox or Ostrowski [who use solvents or water] to arrive at the appellants' claimed invention" (Brief, page 8). This argument is unpersuasive for a number of reasons.

First, the combined teachings of these references support the examiner's conclusion that it would have been obvious to use the modified Ostrowski-Maddox process discussed above for coating materials such as non-metallic cable because Asai generally evinces that the prior art included such materials having

coatings thereon. Viewed from this general perspective, the fact that Asai discloses a specific coating which is water swellable would not have discouraged an artisan from using other coatings (e.g., those disclosed by Maddox) for application to the materials under consideration. Second, an obviousness conclusion would not be forestalled even if the artisan considered himself constrained to use only the specific water swellable coating of Asai for application to these materials. This is because nothing in the disclosures of either Ostrowski or Maddox require the use of only coatings which are solvent or water based. On the other hand, the fact that Asai expressly teaches using an electron beam for curing his water swellable coating (e.g., see lines 30-41 in column 8) supports the examiner's proposed combination based upon a reasonable expectation of success. See In re O'Farrell, 853 F.2d 894, 903, 7 USPQ2d 1673, 1681 (Fed. Cir. 1988).

In light of the foregoing and for the reasons set forth in the Answer, we determine that the examiner has established a prima facie case of obviousness which the appellants have failed to successfully rebut with argument or evidence of nonobviousness. We hereby sustain, therefore, the examiner's § 103 rejections of claims 1, 2, 4, 8 and 9 based on Ostrowski in view of Maddox and of claims 3 and 5-7 based on Ostrowski, Maddox





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